NWS CHANGE FORM PART A	1. DATE SUBMITTED ~~22~~ 31 March 2000

This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).

2. ORIGINATOR OFFICE APO	3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/AWO1	4. COGNIZANT TECHNICAL INDIVIDUAL Name: Mike Buchness/Chuck Piercy Routing Code: PRC/APO Phone: (703) 556-2306 301-713-1570x124	5. ORIGINATOR TRACKING NUMBER P43N_PRC_A100042

6. SYSTEMS AFFECTED BY CHANGE

☐ DATA PRODUCTS (Complete Data Products Supplement)

☐ ASOS ☒ AWIPS ☐ CRS ☐ NEXRAD ☐ OTHER (specify) _____

7. WSH TRACKING NUMBER

NWS 572
3/31/00

8. TITLE OF CHANGE

MHS Software Upgrades

9. TYPE OF CHANGE

☐ HARDWARE ☒ SOFTWARE ☐ DOCUMENTATION ONLY

10. SITES AFFECTED (Attach Part B, Page 2, if needed)

All sites.

11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.)

Request for Change NWS 552 (NCF Improvements, phase II) added a second pair os MHS servers. This Software upgrade uses the second pair of MHS servers to eliminate single points of failure at the NCF X.400 MTA and the serviceguard cluster it runs in. Also will alleviate some potential throughput problems at the NCF MTA.

12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)

Add a pair of MHS servers to the NCF. Redirect half of the sites to that pair as a primary NCF MHS and use the existing DS's as backup NCF MHS. The other half of the sites will be configured to use the DS's as the primary and the MS's as the backup. Modify MTA list at all sites

13. ALTERNATE SOLUTIONS

None

14. REQUIRED CHANGE DATE ASAP	15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.) Availability and throughput enhancements for NCF MHS.

CCB/PMC/CMB DECISION

16. DECISION AUTHORITY LEVEL	☐ CCB LEVEL ONLY	☐ PMC or NWS CMB DECISION REQUIRED

17. CCB LEVEL DECISION	☐ APPROVED ☐ RECOMMEND APPROVAL ☐ DISAPPROVED	SIGNATURE _____ DATE SIGNED _____

FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED

18. PMC OR NWS CMB DECISION	☐ APPROVED ☐ DISAPPROVED	SIGNATURE _____ DATE SIGNED _____

NWS CHANGE FORM
PART A - DATA PRODUCTS SUPPLEMENT

NWS CHANGE FORM PART A - DATA PRODUCTS SUPPLEMENT	**1. ORIGINATOR TRACKING NUMBER** P42N_PRC_A100042
This information is required for Data Products submissions. (Submitters should complete all applicable blocks, if known. WSH will assist.) Attach extra pages if necessary.	**2. WSH TRACKING NUMBER** NWS 572

3. AWIPS ID		4. AFOS PIL			5. WMO HEADER	6. ADD REV DEL	7. SEAS Y/N	8. CHAR PER MSG	9. FREQUENCY	10. NWSTG DISTR	11. AFOS DISTR	NWWS ONLY		
NNN	XXX	CCC	NNN	XXX								12. STATE CIRCUITS	13. PRIME UPLINK	14. B/U UPLINK
N/A														

FOR METAR CHANGES ONLY							19. INTERNAL NWS USE ONLY ☐	20. PRODUCT SOURCE	21. AWIPS DATA TYPE
15. COMMS ID	16. N. LATITUDE			17. W. LONGITUDE			18. ELEV (M)		
	DEG	MIN	SEC	DEG	MIN	SEC			

22.	A. CHANGE NOTICE	B. EFFECTIVE DATE	C. ISSUE DATE
AWIPS			
AFOS			
NWWS			

NWS CHANGE FORM
PART B

	1. ORIGINATOR TRACKING NUMBER
	P42N_PRC_A100042
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.	**2. WSH TRACKING NUMBER**
	NWS 572

FUNDING INFORMATION

Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)	3. SOURCE OF FUNDING	4. TOTAL COST $
5. DEVELOPMENT COSTS (Estimate development costs) . See item #9.		AMOUNT
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs) N/A		AMOUNT
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs) N/A		AMOUNT
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs) N/A		AMOUNT
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs) PRC (Cost included in CLIN 018, CLIN 101, and CLIN 103)		AMOUNT
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits) NCF		AMOUNT

SUPPORTING INFORMATION AND SCHEDULES
Provide detailed information needed to implement the requested change.

10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E) N/A	11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.) .N/A
12. IMPLEMENTATION/RETROFIT SCHEDULE See Attachment A.	13. FACILITY INFORMATION (Attach facility drawings/plans.) N/A
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.) N/A	15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED N/A
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each) N/A	17. COORDINATION OF CHANGE WITH OTHER CHANGES N/A
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.) N/A	19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.) N/A
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.) N/A	21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.) N/A

22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.)

N/A

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PART B - PHYSICAL ITEM AND DOCUMENT IMPACT MATRIX SUPPLEMENT</th>
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P42N_PRC_A100042</th>
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<td colspan="2">This information is required prior to publication of Engineering Modification Notes and Software Release Notes. List physical items to be replaced and specify any changes in related documentation. (Submitters should complete this information, if known. WSH will assist.)</td>
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NWS 572</td>
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<td rowspan="2">3. ITEM NAME, CIRCUIT TYPE, SOFTWARE VERSION, OR SITE LOCATION</td>
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NWS CHANGE FORM
PART C

WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.

2. WSH TRACKING NUMBER

NWS 572

3. CCB COST EVALUATION

NWS COST $ FAA COST $ DOD COST $ OTHER AGENCY COST $ TOTAL COST $
(SPECIFY)_____

4. IMPLEMENTATION DOCUMENTS REQUIRED

☐ Engineering Modification Note   ☐ Software Release Notes   ☐ Other Document (Specify)_____

ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.

5. IMPLEMENTATION ACTIVITY REQUIRED	6. REQUIRED COMPLETION DATE	7. RESPONSIBLE PERSON AND OFFICE	8. DOCUMENT OR ACTION REQUIRED TO VERIFY COMPLETION
A. Coordinate Implementaion Schedule with NCF through SST	20 March 00	Thigpen/SST, W/APO3	N/A
B. NCF install the change	29 March 00	Thigpen/SST, W/APO3	
C. Ensure the appropriate WSH management information systems and configuration management data bases are updated to reflect these changes	20 June 00	Michelle deTommaso W/OSO113	

Attachment A

Additional Information on Solution, Schedule, Installation, and Coordination

1.   Has the solution been **tested**?
 Yes, SwIT tested on the TNCF using the test bed sites (TBDW,TBDR,TBW3,TBW4) as field sites.

2.   Does this change need to be tested on **the NMT** prior to going to the sites?
 No. This is primarily an NCF change. The NMT may be a good candidate Beta test site (see below).

3   Which **sites** will be implemented with this change (e.g., all WFO sites, all sites, etc...)?
Primarily NCF. MTA configuration changes at all sites.

4. Specific **schedule for implementation at the sites**

 First the NCF needs to be updated. Then a small set of sites will have their MTA configuration changed for a Beta test period of a week or so.   Then all sites will have their MTA configuration updated.

5.   Impacted documentation.
 NCF documentation will need to be updated

6.   **Coordination:**
Who will implement this change? (Note: normally, it's the Site Support Team (SST) who will direct the NCF to push the change to the sites (with the assistant of the Engineer). If this is not the case, please describe the actual implementation process (e.g., a CD will be delivered to the site, and the site's ESA will install and notify
 the SST, etc...)

 Mike Buchness. The site software changes will be pushed out from the NCF.   The MTA configuration changes can be done on the fly with no impact to the sites.

6.1.   Any additional coordination need to be done for this installation (e.g., R4.2 needs to be already installed at the sites prior to this change).
 No. Site MTA configuration change can be made regardless of site release level. However, future releases may overwrite the change, so the MTA will have to be reconfigured after any site installation after this update
 until R5.0 is installed.

7   As an attachment to the RC, please provide **a list of impacted files (including the executables), the installation and de-installation instructions for this change.**
Field Sites (DS1,DS2): /home/awipsadm/mtalist/mtalist.*

NCF (DS1,DS2, DS5):
/awips/ops/bin/nwws_send

NCF (MS1,MS2)
/awips/ops/bin/nwws_send
/awips/ops/bin/dump_warning_logs
/awips/ops/bin/mcCommon
/awips/ops/bin/register.crontabs
/awips/ops/bin/sharedNCF.cmds
/awips/ops/bin/config.NCFcrontabs
/awips/ops/bin/mcsgNCF_install.sh
/awips/ops/bin/cmapplyMHS.sh
/awips/ops/bin/cmcheckMHS.sh
/awips/ops/bin/msMHS.control
/awips/ops/bin/msMHS.halt.cmds
/awips/ops/bin/msMHS.run.cmds
/awips/ops/bin/arch_cleanup_mhs
/awips/ops/bin/arch_shutdown_mhs
/awips/ops/bin/arch_startup_mhs
/awips/ops/data/mc/cmclconfMHS.ascii
/awips/ops/data/mc/msMHSconf.ascii
/awips/ops/data/mc/root.ms1.msMHS.NCFcron
/awips/ops/data/mc/root.ms2.msMHS.NCFcron
/awips/ops/data/mc/msMHS_mount_dsDown.fstab
/awips/ops/data/mc/root.ms1.NCFcron
/awips/ops/data/mc/root.ms2.NCFcron
/awips/ops/data/mhs/default_addr.data(.ncf)

To install at a field site do the following on ds1 and ds2:
cp /home/awipsadm/mtalist/mtalist.<site_id /usr/x400mail/mtalist
cp /home/awipsadm/mtalist/mtalist.<site_id /usr/x400mail/addmtas.new

To uninstall at a field site do the following on ds1 and ds2:
cp /home/awipsadm/mtalist/mtalist.<site_id.old /usr/x400mail/mtalist
cp /home/awipsadm/mtalist/mtalist.<site_id.old /usr/x400mail/addmtas.new